Fig. 1

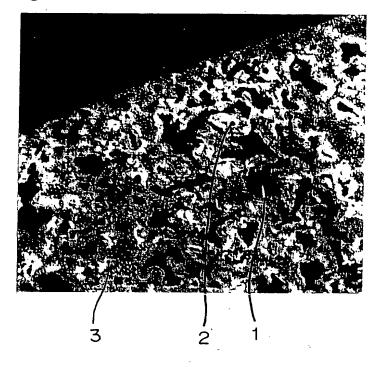
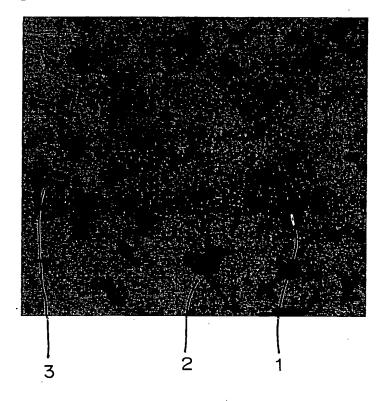


Fig. 2





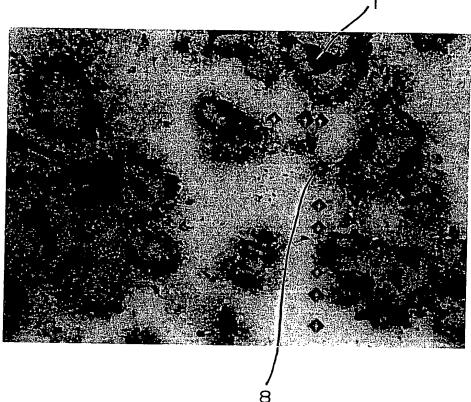
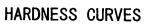
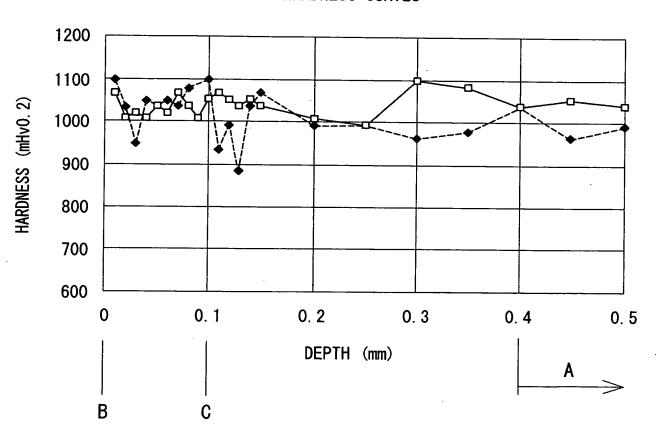


Fig. 4





DECOMPOSITION OF REMAINING 7/RELAXATION OF NON-OXYGEN (NITROGEN) ATMOSPHERE 580°C×1.5H TEMPERING DECOMPOSITION OF REMAINING 7/RELAXAT QUENCHING DISTORTION QUENCHING DISTORTION **TEMPERING** 580° C × 1. 5H 480° C × 1. 5H TEMPER ING **TEMPERING ATMOSPHERE** OIL QUENCH NON-OXYGEN (NITROGEN) MARTENSITIZING OF MATRIX 870°C×1.0H **ATMOSPHERE** CARBURIZING **ATMOSPHERE** CONTINUOUS **QUENCHING** QUENCHING FURNACE POWDER BONDING + MARTENSITIZING OF MATRIX GAS QUENCHING ROOM TEMP GAS COOL ING SINTERING Batch furnace $1180^{\circ}\text{C} \times 1.0\text{H}$ POWDER BONDING SINTERING BATCH FURNACE 1180°C×1.0H SINTERING VACUUM ROOM TEMP VACUUM ROOM TEMP SAMPLE X SAMPLE Y SAMPLE Z

Fig. 5

Fig. 6

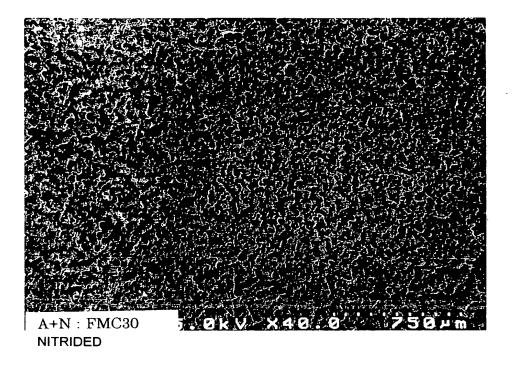


Fig. 7

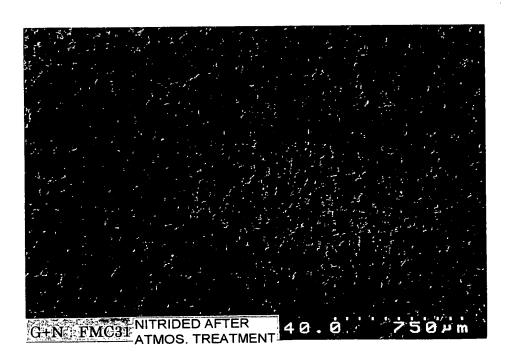


Fig. 8

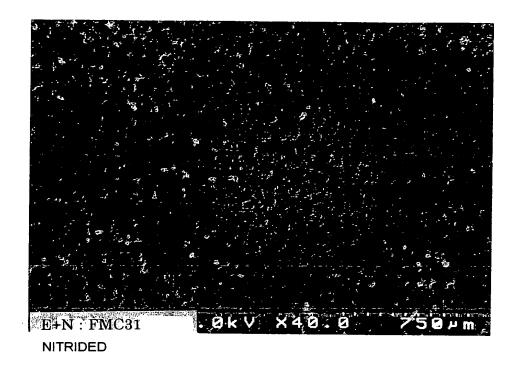
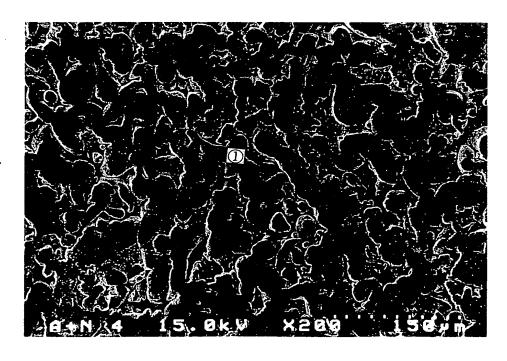


Fig. 9



BEST AVAILABLE COPY

Fig. 10

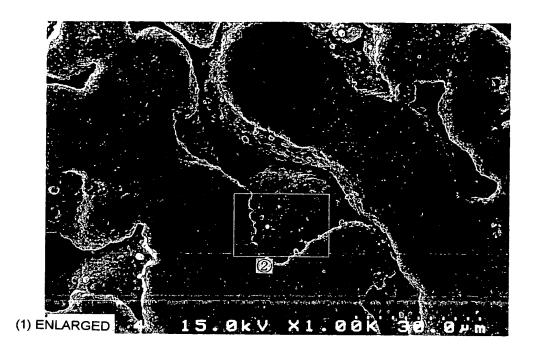


Fig. 11

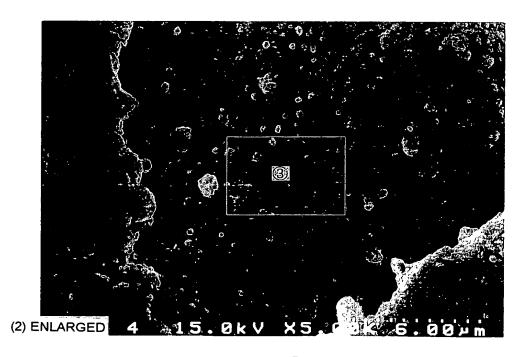


Fig. 12

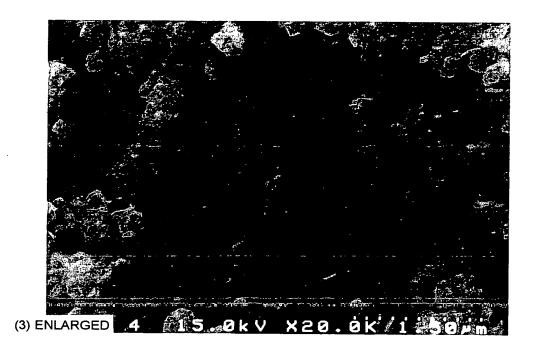


Fig. 13

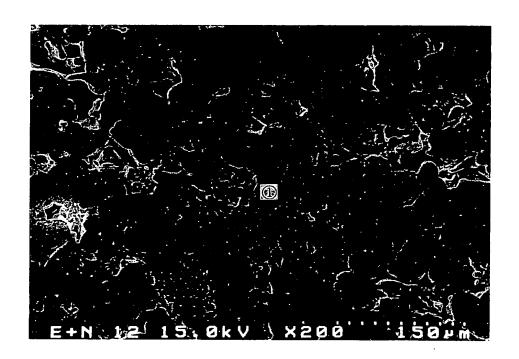


Fig. 14

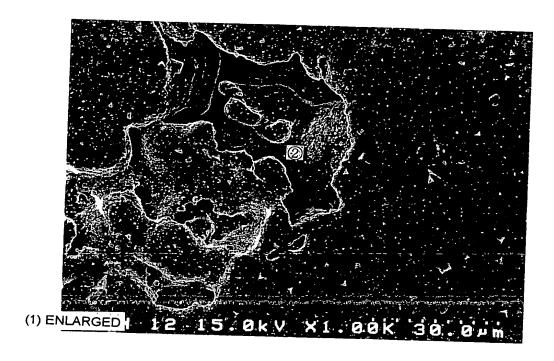


Fig. 15

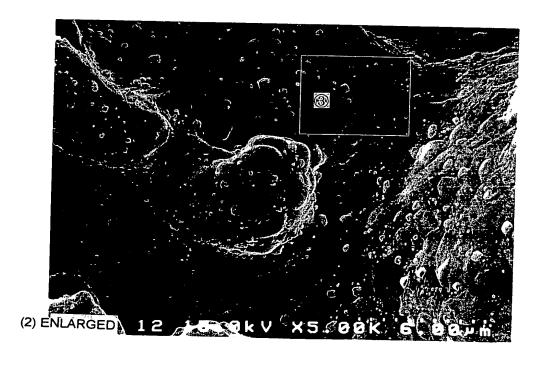


Fig. 16

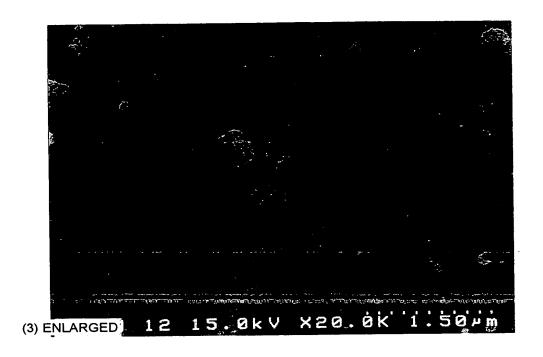


Fig. 17

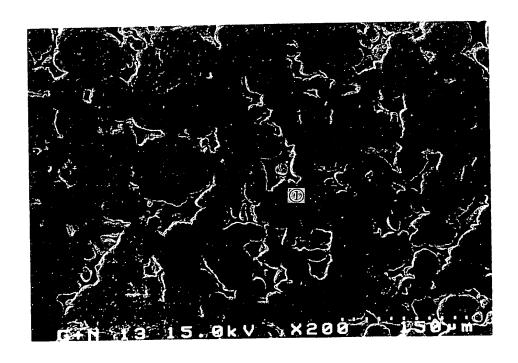


Fig. 18

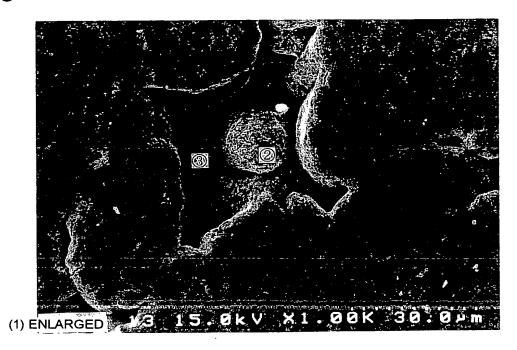


Fig. 19

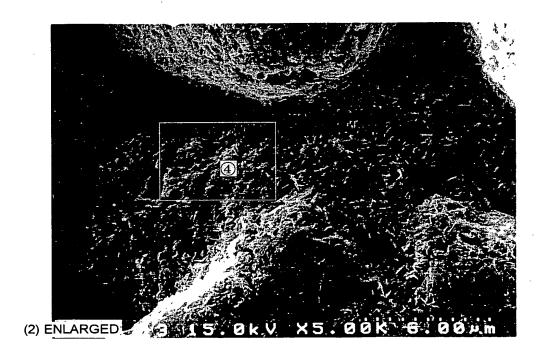


Fig. 20

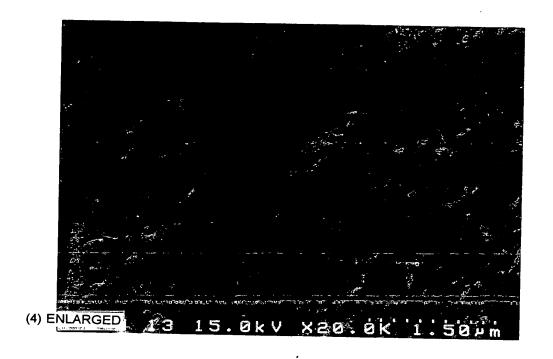
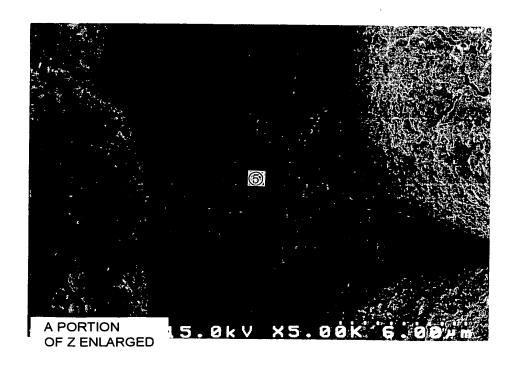


Fig. 21



BEST AVAILABLE COPY DEST AVAILABLE COPY

Fig. 22

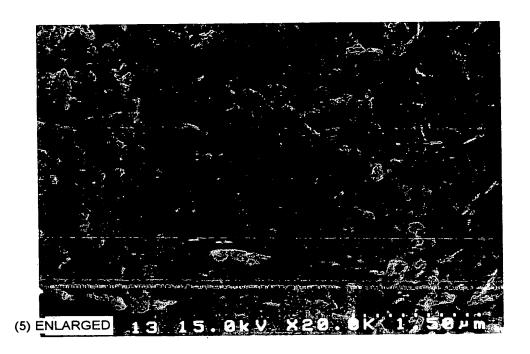


Fig.23

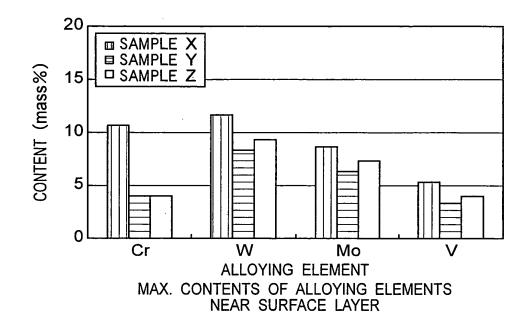


Fig.24

